

=> s carvedilol?

L1 13 CARVEDILOL?

=> d l1 1-13

L1 ANSWER 1 OF 13 REGISTRY COPYRIGHT 2005 ACS on STN

RN 787598-91-8 REGISTRY

ED Entered STN: 24 Nov 2004

CN Benzoic acid, 2-hydroxy-, compd. with 1-(9H-carbazol-4-yloxy)-3-[[2-(2-methoxyphenoxy)ethyl]amino]-2-propanol (1:1) (9CI) (CA INDEX NAME)

OTHER NAMES:

CN **Carvedilol salicylate**

MF C24 H26 N2 O4 . C7 H6 O3

SR CA

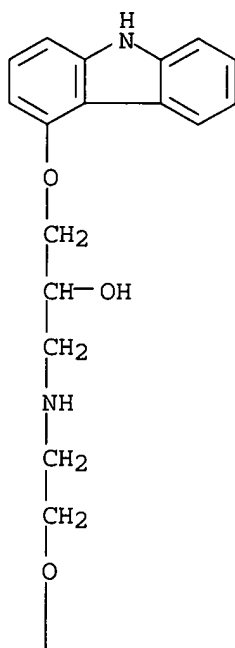
LC STN Files: CA, CAPLUS

CM 1

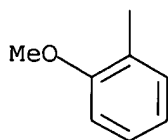
CRN 72956-09-3

CMF C24 H26 N2 O4

PAGE 1-A



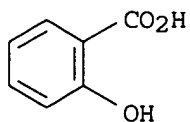
PAGE 2-A



CM 2

CRN 69-72-7

CMF C7 H6 O3



1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L1 ANSWER 2 OF 13 REGISTRY COPYRIGHT 2005 ACS on STN

RN 787598-89-4 REGISTRY

ED Entered STN: 24 Nov 2004

CN 2-Propanol, 1-(9H-carbazol-4-yloxy)-3-[[2-(2-methoxyphenoxy)ethyl]amino]-, ethanedioate (1:1) (salt) (9CI) (CA INDEX NAME)

OTHER NAMES:

CN **Carvedilol oxalate**

MF C24 H26 N2 O4 . C2 H2 O4

SR CA

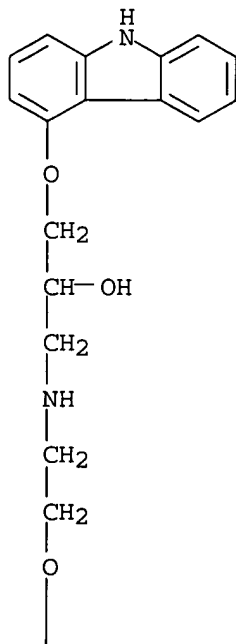
LC STN Files: CA, CAPLUS, CASREACT

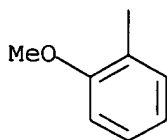
CM 1

CRN 72956-09-3

CMF C24 H26 N2 O4

PAGE 1-A

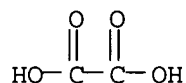




CM 2

CRN 144-62-7

CMF C2 H2 O4



1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L1 ANSWER 3 OF 13 REGISTRY COPYRIGHT 2005 ACS on STN

RN 610309-89-2 REGISTRY

ED Entered STN: 29 Oct 2003

CN 2-Propanol, 1-(9H-carbazol-4-yloxy)-3-[[2-(2-methoxyphenoxy)ethyl]amino]-, phosphate (salt), hydrate (2:2:1) (9CI) (CA INDEX NAME)

OTHER NAMES:

CN **Carvedilol phosphate**

CN SKF 105517D

MF C24 H26 N2 O4 . H3 O4 P . 1/2 H2 O

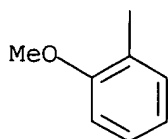
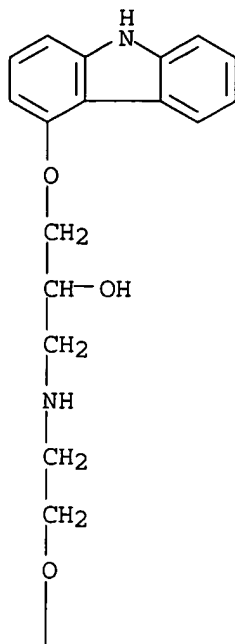
SR CAS Client Services

LC STN Files: ADISINSIGHT, CA, CAPLUS

CM 1

CRN 72956-09-3

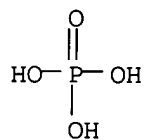
CMF C24 H26 N2 O4



CM 2

CRN 7664-38-2

CMF H3 O4 P

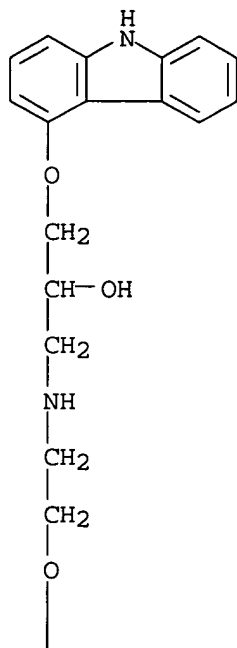


1 REFERENCES IN FILE CA (1907 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

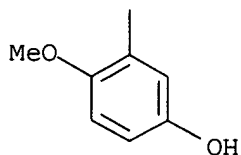
L1 ANSWER 4 OF 13 REGISTRY COPYRIGHT 2005 ACS on STN  
RN 142227-51-8 REGISTRY  
ED Entered STN: 03 Jul 1992  
CN Phenol, 3-[2-[[3-(9H-carbazol-4-yloxy)-2-hydroxypropyl]amino]ethoxy]-4-methoxy- (9CI) (CA INDEX NAME)  
OTHER NAMES:

CN 5'-Hydroxyphenylcarvedilol  
 CN 5-Hydroxycarvedilol  
 CN BM 140830  
 FS 3D CONCORD  
 DR 146601-40-3  
 MF C24 H26 N2 O5  
 CI COM  
 SR CA  
 LC STN Files: CA, CAPLUS, CHEMCATS, USPATFULL

PAGE 1-A



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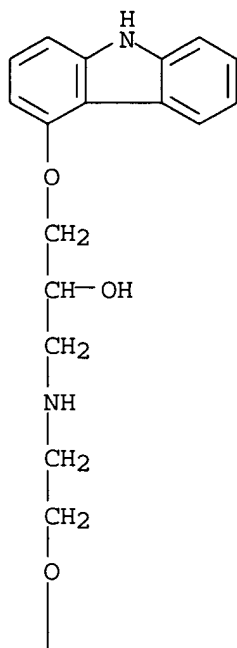
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

10 REFERENCES IN FILE CA (1907 TO DATE)  
 10 REFERENCES IN FILE CAPLUS (1907 TO DATE)

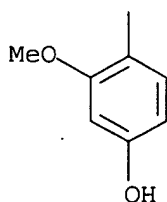
L1 ANSWER 5 OF 13 REGISTRY COPYRIGHT 2005 ACS on STN  
 RN 142227-49-4 REGISTRY  
 ED Entered STN: 03 Jul 1992  
 CN Phenol, 4-[2-[[3-(9H-carbazol-4-yloxy)-2-hydroxypropyl]amino]ethoxy]-3-methoxy- (9CI) (CA INDEX NAME)  
 OTHER NAMES:  
 CN 4'-Hydroxyphenylcarvedilol

CN **4-Hydroxycarvedilol**  
 CN BM 140686  
 CN BM 14686  
 FS 3D CONCORD  
 DR 146574-45-0  
 MF C24 H26 N2 O5  
 CI COM  
 SR CA  
 LC STN Files: CA, CAPLUS, CHEMCATS, USPATFULL

PAGE 1-A



PAGE 2-A



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

10 REFERENCES IN FILE CA (1907 TO DATE)  
 10 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L1 ANSWER 6 OF 13 REGISTRY COPYRIGHT 2005 ACS on STN  
 RN 123372-14-5 REGISTRY  
 ED Entered STN: 27 Oct 1989  
 CN Phenol, 2-[2-[[3-(9H-carbazol-4-yloxy)-2-hydroxypropyl]amino]ethoxy]-, (R)- (9CI) (CA INDEX NAME)

OTHER NAMES:

CN (R) - (+) -O-Desmethylocarvedilol

FS STEREOSEARCH

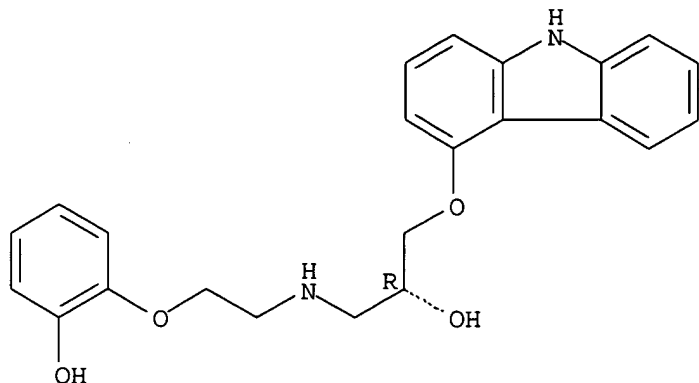
MF C23 H24 N2 O4

SR CA

LC STN Files: BEILSTEIN\*, CA, CAPLUS, CHEMCATS

(\*File contains numerically searchable property data)

Absolute stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L1 ANSWER 7 OF 13 REGISTRY COPYRIGHT 2005 ACS on STN

RN 123372-13-4 REGISTRY

ED Entered STN: 27 Oct 1989

CN Phenol, 2-[2-[[3-(9H-carbazol-4-yloxy)-2-hydroxypropyl]amino]ethoxy]-,  
(S) - (9CI) (CA INDEX NAME)

OTHER NAMES:

CN (S) - (-) -O-Desmethylocarvedilol

FS STEREOSEARCH

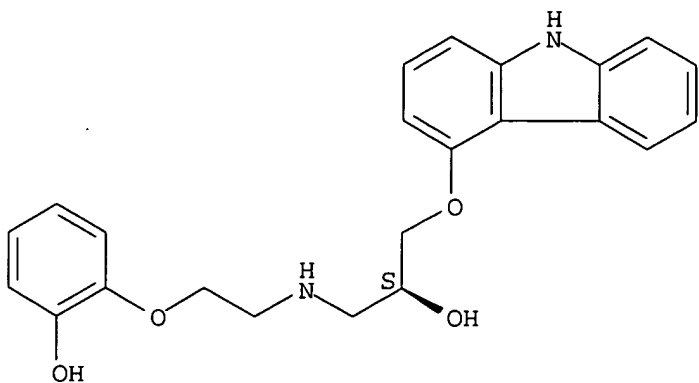
MF C23 H24 N2 O4

SR CA

LC STN Files: BEILSTEIN\*, CA, CAPLUS, CHEMCATS

(\*File contains numerically searchable property data)

Absolute stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

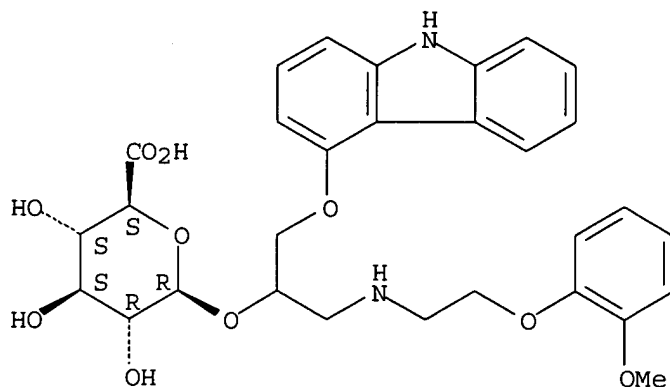
1 REFERENCES IN FILE CA (1907 TO DATE)  
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L1 ANSWER 8 OF 13 REGISTRY COPYRIGHT 2005 ACS on STN  
RN 114869-83-9 REGISTRY  
ED Entered STN: 18 Jun 1988  
CN  $\beta$ -D-Glucopyranosiduronic acid, 2-(9H-carbazol-4-yloxy)-1-[[[2-(2-methoxyphenoxy)ethyl]amino]methyl]ethyl (9CI) (CA INDEX NAME)

OTHER NAMES:

CN **Carvedilol glucuronide**  
FS STEREOSEARCH  
MF C30 H34 N2 O10  
SR CA  
LC STN Files: CA, CAPLUS

Absolute stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

4 REFERENCES IN FILE CA (1907 TO DATE)  
4 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L1 ANSWER 9 OF 13 REGISTRY COPYRIGHT 2005 ACS on STN  
RN 95094-00-1 REGISTRY  
ED Entered STN: 03 Mar 1985  
CN 2-Propanol, 1-(9H-carbazol-4-yloxy)-3-[[2-(2-methoxyphenoxy)ethyl]amino]-, (2S)- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 2-Propanol, 1-(9H-carbazol-4-yloxy)-3-[[2-(2-methoxyphenoxy)ethyl]amino]-, (S)-

OTHER NAMES:

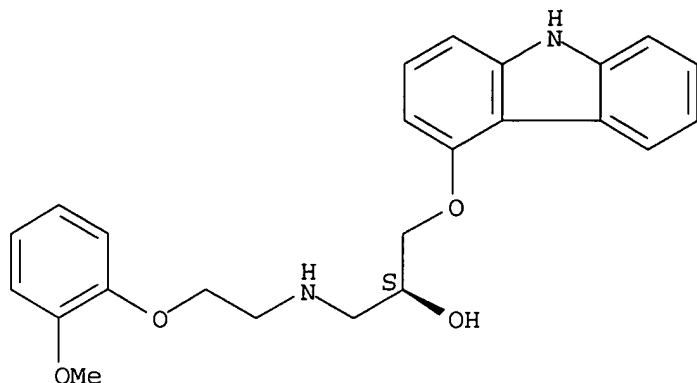
CN **(-)-Carvedilol**  
CN **(S)-(-)-Carvedilol**  
CN (S)-1-(9H-carbazol-4-yloxy)-3-[[2-(2-methoxyphenoxy)ethyl]amino]propan-2-ol  
CN **(S)-Carvedilol**  
FS STEREOSEARCH  
MF C24 H26 N2 O4  
CI COM  
LC STN Files: ANABSTR, BEILSTEIN\*, BIOBUSINESS, BIOSIS, CA, CAPLUS, CASREACT, CHEMCATS, CSCHM, IMSPATENTS, IMSRESEARCH, IPA, TOXCENTER,



USPAT2, USPATFULL

(\*File contains numerically searchable property data)

Absolute stereochemistry.



\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

63 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

63 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L1 ANSWER 10 OF 13 REGISTRY COPYRIGHT 2005 ACS on STN

RN 95093-99-5 REGISTRY

ED Entered STN: 03 Mar 1985

CN 2-Propanol, 1-(9H-carbazol-4-yloxy)-3-[[2-(2-methoxyphenoxy)ethyl]amino]-, (2R)-(9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 2-Propanol, 1-(9H-carbazol-4-yloxy)-3-[[2-(2-methoxyphenoxy)ethyl]amino]-, (R)-

OTHER NAMES:

CN **(+)-Carvedilol**

CN (R)-1-(9H-carbazol-4-yloxy)-3-[[2-[2-(methoxy)phenoxy]ethyl]amino]propan-2-ol

CN **(R)-Carvedilol**

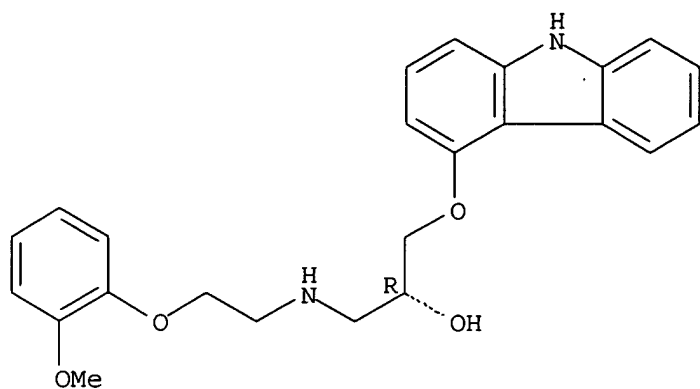
CN **R-(+)-Carvedilol**

FS STEREOSEARCH

MF C24 H26 N2 O4

LC STN Files: ADISNEWS, ANABSTR, BEILSTEIN\*, CA, CAPLUS, CASREACT, CHEMCATS, CSCHM, IMSPATENTS, IMSRESEARCH, IPA, TOXCENTER, USPATFULL (\*File contains numerically searchable property data)

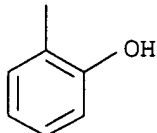
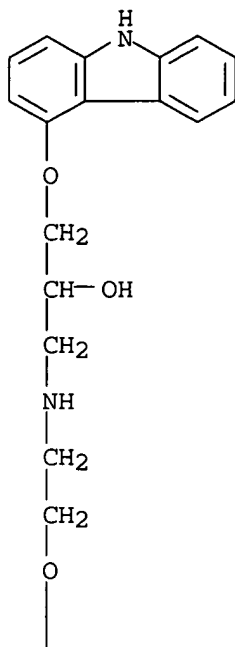
Absolute stereochemistry.



**\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\***

63 REFERENCES IN FILE CA (1907 TO DATE)  
 2 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
 63 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L1 ANSWER 11 OF 13 REGISTRY COPYRIGHT 2005 ACS on STN  
 RN 72956-44-6 REGISTRY  
 ED Entered STN: 16 Nov 1984  
 CN Phenol, 2-[2-[[3-(9H-carbazol-4-yloxy)-2-hydroxypropyl]amino]ethoxy] -  
 (9CI) (CA INDEX NAME)  
 OTHER NAMES:  
 CN BM 14242  
 CN **Desmethylocarvedilol**  
 FS 3D CONCORD  
 MF C23 H24 N2 O4  
 CI COM  
 LC STN Files: BEILSTEIN\*, BIOBUSINESS, CA, CAPLUS, CHEMCATS, CSCHEM, IPA,  
 MEDLINE, TOXCENTER, USPATFULL  
 (\*File contains numerically searchable property data)



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19 REFERENCES IN FILE CAPLUS (1907 TO DATE)

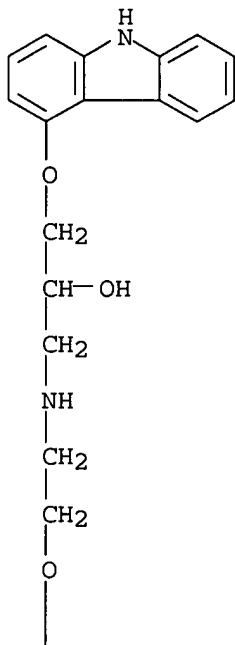
L1 ANSWER 12 OF 13 REGISTRY COPYRIGHT 2005 ACS on STN  
RN 72956-09-3 REGISTRY  
ED Entered STN: 16 Nov 1984  
CN 2-Propanol, 1-(9H-carbazol-4-yloxy)-3-[[2-(2-methoxyphenoxy)ethyl]amino]-(9CI) (CA INDEX NAME)

OTHER NAMES:

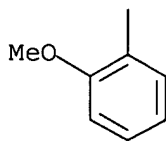
CN **(±)-Carvedilol**  
CN Artist  
CN BM 14190  
CN **Carvedilol**  
CN Carvediol  
CN Coreg  
CN Dilatrend  
CN Dimitone  
CN DQ 2466  
CN Eucardic  
CN Kredex  
CN Querto

CN SKF 105517  
 FS 3D CONCORD  
 DR 107741-96-8  
 MF C24 H26 N2 O4  
 CI COM  
 LC STN Files: ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN\*,  
 BIOBUSINESS, BIOSIS, BIOTECHNO, CA, CANCERLIT, CAPLUS, CASREACT, CEN,  
 CHEMCATS, CIN, CSChem, DDFU, DIOGENES, DRUGU, EMBASE, HSDB\*,  
 IMSCoSEARCH, IMSDRUGNEWS, IMSPATENTS, IMSRESEARCH, IPA, MEDLINE, MRCK\*,  
 PATDPASPC, PHAR, PROMT, PROUSDDR, PS, RTECS\*, SYNTHLINE, TOXCENTER,  
 USAN, USPAT2, USPATFULL  
 (\*File contains numerically searchable property data)  
 Other Sources: WHO

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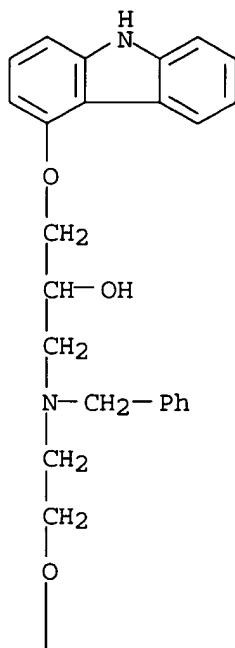
\*\*PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT\*\*

1043 REFERENCES IN FILE CA (1907 TO DATE)  
 23 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
 1053 REFERENCES IN FILE CAPLUS (1907 TO DATE)

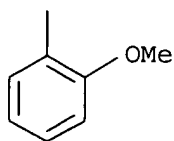
L1 ANSWER 13 OF 13 REGISTRY COPYRIGHT 2005 ACS on STN  
 RN 72955-94-3 REGISTRY

ED Entered STN: 16 Nov 1984  
 CN 2-Propanol, 1-(9H-carbazol-4-yloxy)-3-[[2-(2-methoxyphenoxy)ethyl](phenylm  
 ethyl)amino]- (9CI) (CA INDEX NAME)  
 OTHER NAMES:  
 CN **N-Benzylcarvedilol**  
 FS 3D CONCORD  
 MF C31 H32 N2 O4  
 LC STN Files: BEILSTEIN\*, CA, CAPLUS, CASREACT, CHEMLIST, USPAT2, USPATFULL  
 (\*File contains numerically searchable property data)

PAGE 1-A



PAGE 2-A



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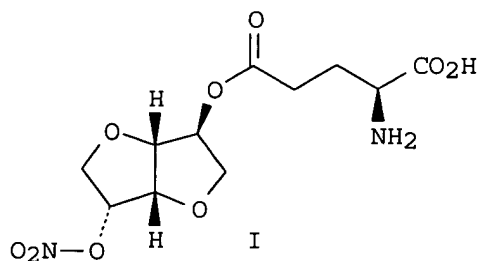
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L4 ANSWER 1 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN  
 ACCESSION NUMBER: 2005:300196 CAPLUS  
 DOCUMENT NUMBER: 142:355575  
 TITLE: Preparation of nitrosated glutamic acid compounds for  
 use in pharmaceutical compositions  
 INVENTOR(S): Garvey, David S.; Earl, Richard A.; Ezawa, Maiko;  
 Fang, Xinqin; Gaston, Ricky D.; Khanapure, Subhash P.;  
 Lin, Chia-en; Ranatunge, Ramani R.; Stevenson, Cheri  
 A.; Wey, Shiow-jyi  
 PATENT ASSIGNEE(S): Nitromed, Inc., USA  
 SOURCE: PCT Int. Appl., 151 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005030135	A2	20050407	WO 2004-US31372	20040927
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				

PRIORITY APPLN. INFO.: US 2003-505921P P 20030926  
 GI



AB The invention describes novel nitrosated glutamic acid compds.  
 RbNHCH(CH<sub>2</sub>CH<sub>2</sub>CO-K)CO-U3-D [Rb is H or alkyl; D is H, V3 or K (V3 is H or  
 NO<sub>2</sub>); U3 is O, S(O)O-2 or NRaRi, where Ra is a lone pair of electrons, H  
 or alkyl and Ri is H, alkyl, aryl, a carboxylic acid or ester,  
 alkylsulfinyl, etc.; K is -W3a-Eb-(CReRf)p1-Ec-(CReRf)x-W3d-(CReRf)y-W3i-

Ej-W3g-(CReRf)z-T3-V3, where a, b, c, d, g, i and j are independently integers 0-3; p1, x, y and z are independently integers 0-10; W3 is CO, CS, T3, (CReRf)1-10, alkyl, aryl, heterocyclyl, arylheterocyclyl or (CH2CH2O)0-5; E is T3, alkyl, aryl, (CReRf)1-10, heterocyclyl, arylheterocyclyl or (CH2CH2O)1-5; T3 is a covalent bond, CO, O, S, SO, SO2 or NRaRi; Re, Rf are independently H, alkyl, cycloalkoxy, halo, hydroxy, hydroxyalkyl, alkoxyalkyl, arylheterocyclyl, alkylaryl, etc. ] and their pharmaceutically-acceptable salts and novel compns. comprising at least one nitrosated glutamic acid compound and optionally at least one nitric oxide donor and/or at least one therapeutic agent. The invention also provides methods for treating various diseases and for targeted delivery of compds. and nitric oxide to organs, cells or tissues containing the enzyme  $\gamma$ -glutamyl transpeptidase. Thus, nitrosated glutamic acid ester I.

HCl was prepared by esterification of Boc-L-Glu-OBu-t (Boc = tert-butoxycarbonyl) with isosorbide-5-mononitrate (DMAP/EDAC in CH2Cl2) and deprotection.

IT 72956-09-3, Carvedilol

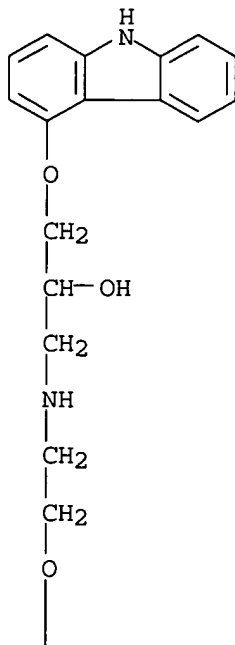
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(preparation of nitrosated glutamic acid compds. for use in pharmaceutical compns.)

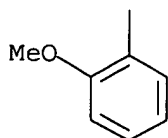
RN 72956-09-3 CAPLUS

CN 2-Propanol, 1-(9H-carbazol-4-yloxy)-3-[[2-(2-methoxyphenoxy)ethyl]amino]-(9CI) (CA INDEX NAME)

PAGE 1-A



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L4 ANSWER 2 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2003:931185 CAPLUS  
DOCUMENT NUMBER: 140:744  
TITLE: 5-HT4 receptor antagonists for the treatment of heart failure  
INVENTOR(S): Levy, Finn Olav  
PATENT ASSIGNEE(S): Medinnova SF, Norway; Dzieglewska, Hanna  
SOURCE: PCT Int. Appl., 68 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2003097065	A1	20031127	WO 2003-GB2134	20030516
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
RW:	GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG			
CA 2485600	AA	20031127	CA 2003-2485600	20030516
EP 1503764	A1	20050209	EP 2003-725415	20030516
R:	AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK			
PRIORITY APPLN. INFO.:			GB 2002-11230	A 20020516
			WO 2003-GB2134	W 20030516

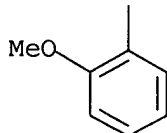
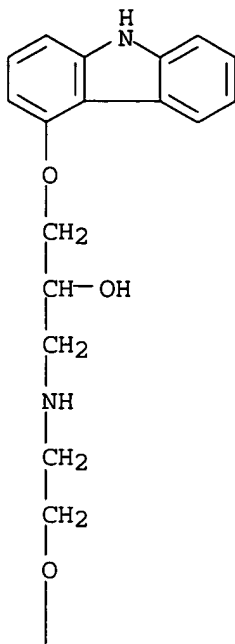
AB This invention provides the use of a 5-HT4 receptor antagonist in the manufacture of a medicament for treating or preventing heart failure. Particular heart disorders to be treated are selected from the group comprising chronic heart failure, congestive heart failure, chronic congestive heart failure and heart failure resulting from ischemic heart disease. Methods of treating heart failure using 5-HT4 receptor antagonists and pharmaceutical compns. containing 5-HT4 receptor antagonists are also provided. Treatment of post-infarction congestive heart failure in rats with 5-HT4 receptor antagonist SB207266 showed a trend towards normalization of myocardial function.

IT **72956-09-3**, Carvedilol  
RL: BSU (Biological study, unclassified); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(capsules containing SB207266 **HCl** and; 5-HT4 receptor antagonists for treatment of heart failure)

RN 72956-09-3 CAPLUS

CN 2-Propanol, 1-(9H-carbazol-4-yloxy)-3-[[2-(2-methoxyphenoxy)ethyl]amino]-(9CI) (CA INDEX NAME)





REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 3 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2003:319257 CAPLUS

DOCUMENT NUMBER: 138:343856

TITLE: Buccal sprays or capsules containing cardiovascular or renal drugs

INVENTOR(S): Dugger, Harry A.

PATENT ASSIGNEE(S): USA

SOURCE: U.S. Pat. Appl. Publ., 15 pp., Cont.-in-part of U.S. Ser. No. 537,118.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 16

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003077229	A1	20030424	US 2002-230075	20020829
WO 9916417	A1	19990408	WO 1997-US17899	19971001
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ,				

LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL,  
PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US,  
UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM  
RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR,  
GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA,  
GN, ML, MR, NE, SN, TD, TG

EP 1029536 A1 20000823 EP 2000-109347 19971001  
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
IE, SI, LT, LV, FI, RO

EP 1036561 A1 20000920 EP 2000-109357 19971001  
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
IE, SI, LT, LV, FI, RO

WO 2004019909 A2 20040311 WO 2003-US26853 20030827  
WO 2004019909 A3 20040708

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,  
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,  
GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,  
LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM,  
PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN,  
TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW  
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,  
KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES,  
FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR,  
BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

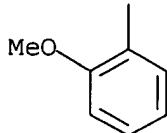
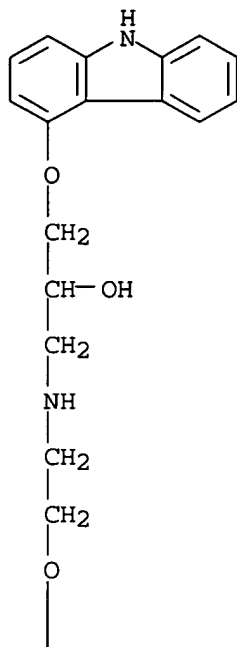
US 2005025713 A1 20050203 US 2004-928979 20040827  
PRIORITY APPLN. INFO.: WO 1997-US17899 A2 19971001  
US 2000-537118 A2 20000329  
EP 1997-911621 A3 19971001  
US 2002-230075 A 20020829

AB Buccal aerosol sprays or capsules using polar and non-polar solvent have  
now been developed which provide biol. active compds. for rapid absorption  
through the oral mucosa, resulting in fast onset of effect. The buccal  
polar compns. of the invention comprise formulation A: aqueous polar solvent,  
active compound, and optional flavoring agent; formulation B: aqueous polar  
solvent, active compound, optionally flavoring agent, and propellant;  
formulation C: non-polar solvent, active compound, and optional flavoring  
agent; and formulation D: non-polar solvent, active compound, optional  
flavoring agent, and propellant. Thus, a polar lingual spray contained  
isoproterenol-**HCl** 0.5-6, water 50-75, EtOH 5-10, PEG 5-15,  
sorbitol 0.4-1.0, aspartame 0.04-0.1, and flavors 2-3%.

IT **72956-09-3**, Carvedilol  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(buccal sprays or capsules containing cardiovascular or renal drugs)

RN 72956-09-3 CAPLUS

CN 2-Propanol, 1-(9H-carbazol-4-yloxy)-3-[[2-(2-methoxyphenoxy)ethyl]amino]-  
(9CI) (CA INDEX NAME)



L4 ANSWER 4 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN  
 ACCESSION NUMBER: 2002:755212 CAPLUS  
 DOCUMENT NUMBER: 137:279361  
 TITLE: Preparation of nitrosated and nitrosylated  
 $\alpha$ -adrenergic receptor antagonists for the  
 treatment of sexual dysfunction  
 INVENTOR(S): Garvey, David S.; Saenz De Tejada, Inigo; Gaston,  
 Ricky D.; Khanapure, Subhash P.; Shelekhin, Tatiana  
 E.; Wang, Tiansheng  
 PATENT ASSIGNEE(S): USA  
 SOURCE: U.S. Pat. Appl. Publ., 61 pp., Cont.-in-part of U.S.  
 6,294,517.  
 CODEN: USXXCO  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 9  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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US 2002143007	A1	20021003	US 2002-146671	20020516
US 5932538	A	19990803	US 1996-595732	19960202
US 5994294	A	19991130	US 1996-714313	19960918

US 6294517	B1	20010925	US 1998-145143	19980901
PRIORITY APPLN. INFO.:			US 1996-595732	A2 19960202
			US 1996-714313	A2 19960918
			US 1998-145143	A2 19980901
			WO 1997-US1294	A2 19970128

OTHER SOURCE(S):           MARPAT 137:279361

GI

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

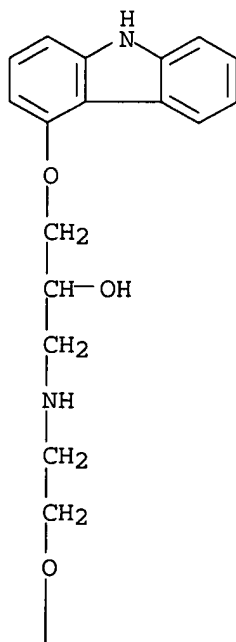
AB Title compds. I, II, III, etc. [R1 = H, alkoxy; R2 = NMe(CH<sub>2</sub>)<sub>a</sub>NHCOR<sub>c</sub>, 6,7-dimethoxy-1,2,3,4-tetrahydroisoquinolin-2-yl, etc.; a = 2, 3; R<sub>c</sub> = heterocyclic, alkyl, hydroxyalkyl, etc.; D = NO, NO<sub>2</sub>, etc.; R<sub>3</sub> = CH<sub>2</sub>N(4-MeC<sub>6</sub>H<sub>4</sub>)(3-DOC<sub>6</sub>H<sub>4</sub>), CH<sub>2</sub>Ph, 2-methoxy-1,4-benzodioxin-2-yl, etc.; D1 = H or D with the proviso that D1 must be D if there is no other D in the compound; R<sub>4</sub> = H, D, COR<sub>d</sub>; R<sub>5</sub> = H, C(O)OR<sub>k</sub>, etc.; R<sub>d</sub> = H, alkyl, cycloalkyl, etc.; R<sub>k</sub> = H, alkyl] were prepared For example, nitrosylation of thiol IV (X = H), e.g., prepared from 4-[2-(dimethylamino)ethoxy]-2-methyl-5-(methylethyl)phenyl acetate in 3-steps, with NaNO<sub>2</sub>/**HCl** afforded IV.**HCl** (X = NO) in 82% yield. Compds. I, II, III, etc., donate, transfer or release nitric oxide or elevate levels of endogenous endothelium-derived relaxing factor, and are useful for treatment of sexual dysfunctions in males and females. In erectile response of anesthetized rabbits (2.5 kg), S-nitrosoglutathione, e.g., prepared from glutathione and NaNO<sub>2</sub>/**HCl**, at 500 µg dosage was able to induce near maximal response relative to the standard dose of pap/phent/PGE<sub>1</sub>.

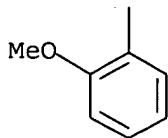
IT **72956-09-3D**, Carvedilol, nitrated or nitrosylated derivs.  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (preparation of nitrosated and nitrosylated α-adrenergic receptor antagonists for the treatment of sexual dysfunction)

RN 72956-09-3 CAPLUS

CN 2-Propanol, 1-(9H-carbazol-4-yloxy)-3-[[2-(2-methoxyphenoxy)ethyl]amino]-(9CI) (CA INDEX NAME)

PAGE 1-A





L4 ANSWER 5 OF 6 CAPLUS COPYRIGHT 2005 ACS on STN  
 ACCESSION NUMBER: 2002:392232 CAPLUS  
 DOCUMENT NUMBER: 136:401912  
 TITLE: Nitrosated and nitrosylated alpha-adrenergic receptor antagonist compounds, compositions and their uses  
 INVENTOR(S): Garvey, David S.; Schroeder, Joseph D.; Saenz de Tejada, Inigo  
 PATENT ASSIGNEE(S): USA  
 SOURCE: U.S. Pat. Appl. Publ., 40 pp., Cont.-in-part of U.S. Ser. No. 714,313.  
 CODEN: USXXCO  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 9  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002061879	A1	20020523	US 2001-24550	20011221
US 5932538	A	19990803	US 1996-595732	19960202
US 5994294	A	19991130	US 1996-714313	19960918
PRIORITY APPLN. INFO.:			US 1996-595732	A2 19960202
			US 1996-714313	A2 19960918
OTHER SOURCE(S):	MARPAT 136:401912			
GI				

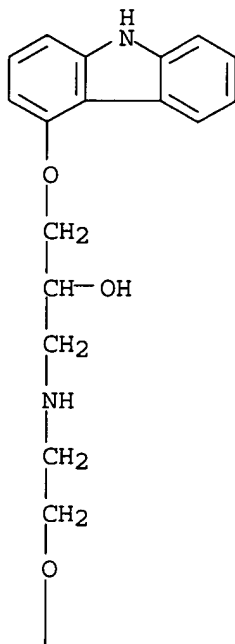
\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB The present invention is directed to nitrosated or nitrosylated a-adrenergic receptor antagonists, e.g. I [Ra = H, alkoxy; Rb = NMe(CH<sub>2</sub>)<sub>a</sub>NHCORc, 6,7-dimethoxy-1,2,3,4-tetrahydroisoquinolin-2-yl; a = 2, 3; Rc = heteroaryl, heterocycle, lower alkyl, hydroxyalkyl, arylheterocycle; D = NO, NO<sub>2</sub>, C(Rd)OC(O)YZ(CR<sub>e</sub>Rf)pTQ; Rd = H, lower alkyl, cycloalkyl, aryl aralkyl, heteroaryl; Y = O, S, C, NRi; Ri = H, lower alkyl; Re, Rf = H, lower alkyl, haloalkyl, cycloalkyl, alkoxy, aryl, heteroaryl, NH<sub>2</sub>, (di)alkylamino, amido, CO<sub>2</sub>H, ester, TQ; ReRf = carbonyl, heterocycle, cycloalkyl; p = 1 - 10; T = bond, O, S, N; Z = bond, lower alkyl, haloalkyl, cycloalkyl, aryl, (CR<sub>e</sub>Rf)p, Q = NO, NO<sub>2</sub>], II [R = CH<sub>2</sub>N(C<sub>6</sub>H<sub>4</sub>Me-4)C<sub>6</sub>H<sub>4</sub>OD1-3, CH<sub>2</sub>Ph, 2-methoxy-1,4-benzodioxin-2-yl, 1-methyl-2,3-dihydroisoindol-2-yl, 5-chloro-2,3-dihydroisoindol-2-yl; D1 = H, D], III [Rh = H, C(O)ORD, C(O)X; X = Y(CR<sub>e</sub>Rf)pG(CR<sub>e</sub>Rf)pTQ; G = bond, TC(O), C(O)T, C{YC(O)Rm}; Rm = heteroaryl, heterocycle], IV [A1 = O, CH<sub>2</sub>], V, (RmRkC)N(D1)(CR<sub>k</sub>R1) [Rk = H, lower alkyl; R1 = CH<sub>2</sub>C<sub>6</sub>H<sub>4</sub>O(CH<sub>2</sub>)bMe, CH<sub>2</sub>C<sub>6</sub>H<sub>4</sub>OD, CH<sub>2</sub>OC<sub>6</sub>H<sub>3</sub>(OMe)2-2,6, CH<sub>2</sub>CH<sub>2</sub>Ph; b = 0, 1; Rn = CH<sub>2</sub>C<sub>6</sub>H<sub>4</sub>(SO<sub>2</sub>NH<sub>2</sub>)-3, 1-oxotetralin-2-yl, 1,4-benzodioxin-2-yl] and RpRkCHCH(Ro)OD [Ro = (1-naphthyloxy)methyl, C<sub>6</sub>H<sub>4</sub>OD1; Rp = 4-benzylpiperidino,

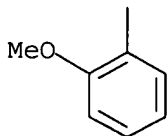
4-(2-methoxyphenyl)piperazino]. The present invention is also directed to compns. comprising  $\alpha$ -adrenergic receptor antagonists that are optionally substituted with at least one NO or NO<sub>2</sub> moiety and compds. that donate, transfer or release nitric oxide or elevate levels of endogenous endothelium-derived relaxing factor, and methods for treating sexual dysfunctions in males and females. Thus, S-Nitrosoglutathione was prepared from glutathione via reaction with NaNO<sub>2</sub> in aqueous HCl. S-Nitrosoglutathione at 500  $\mu$ g was able to induce near maximal erectile response in anesthetized rabbits.

IT 72956-09-3D, Carvedilol, nitrosated or nitrosylated  
 RL: BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (preparation of nitrosated and nitrosylated alpha-adrenergic receptor antagonist compds., compns. and their uses)  
 RN 72956-09-3 CAPLUS  
 CN 2-Propanol, 1-(9H-carbazol-4-yloxy)-3-[[2-(2-methoxyphenoxy)ethyl]amino]-(9CI) (CA INDEX NAME)

PAGE 1-A



PAGE 2-A



anhydrase inhibitors and beta-blockers  
 INVENTOR(S): Dean, Thomas Robert; Desantis, Louis, Jr.  
 PATENT ASSIGNEE(S): Alcon Laboratories, Inc., USA  
 SOURCE: PCT Int. Appl., 32 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9316701	A2	19930902	WO 1993-US1487	19930219
WO 9316701	A3	19940106		
W: AU, CA, JP, US				
RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
AU 9337257	A1	19930913	AU 1993-37257	19930219
AU 677577	B2	19970501		
EP 625903	A1	19941130	EP 1993-906084	19930219
EP 625903	B1	19980812		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE				
JP 07504899	T2	19950601	JP 1993-514967	19930219
JP 2965267	B2	19991018		
CA 2129037	C	19980324	CA 1993-2129037	19930219
AT 169499	E	19980815	AT 1993-906084	19930219
ES 2118941	T3	19981001	ES 1993-906084	19930219
JP 10324640	A2	19981208	JP 1998-44090	19930219
US 5932572	A	19990803	US 1997-920314	19970827
HK 1009941	A1	20000420	HK 1998-110893	19980924
PRIORITY APPLN. INFO.:				
			US 1992-839869	A 19920221
			JP 1993-514967	A3 19930219
			WO 1993-US1487	A 19930219
			US 1993-115970	B1 19930901
			US 1995-526240	B1 19950911

OTHER SOURCE(S): MARPAT 119:256532

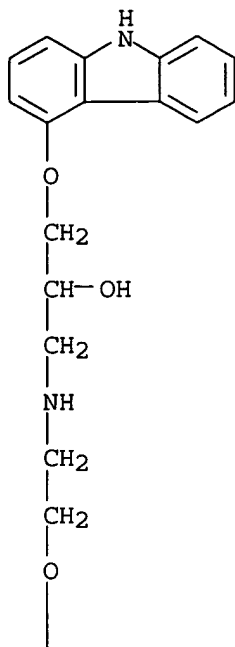
AB Ophthalmic pharmaceutical compns. useful in controlling elevated intraocular pressure associated with glaucoma comprise a combination of a  $\beta$ -blocker and a carbonic anhydrase inhibitor (especially a thiophenesulfonamide derivative) to reduce the production of aqueous humor, preferably formulated as a suspension having a pH of 6.8-7.8. The composition may addnl. contain a mucomimetic anionic polymer and/or a finely divided drug carrier to provide sustained release. Thus, an ophthalmic suspension (pH 7.5) contained betaxolol-HCl 0.28, (R)-3,4-dihydro-4-ethylamino-2-(3-methoxy)propyl-2H-thieno[3,2-e]-1,2-thiazine-6-sulfonamide 1,1-dioxide-HCl 1.7, benzalkonium chloride 0.01, EDTA 0.05, Carbopol 934P 0.4, polysorbate 80 0.05 weight%, mannitol to 300 milliosmolal, and water.

IT 72956-09-3, Carvedilol  
 RL: BIOL (Biological study)  
 (glaucoma treatment with carbonic anhydrase inhibitor and)

RN 72956-09-3 CAPLUS

CN 2-Propanol, 1-(9H-carbazol-4-yloxy)-3-[[2-(2-methoxyphenoxy)ethyl]amino]-(9CI) (CA INDEX NAME)

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PAGE 2-A

